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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,322	06/20/2003	Kazunori Yamashita	FP02-348US	6172
1218	7590	06/22/2004	EXAMINER	
CASELLA & HESPOS 274 MADISON AVENUE NEW YORK, NY 10016			PATEL, TULSIDAS C	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/600,322

**Applicant(s)**

YAMASHITA, KAZUNORI

**Examiner**

T. C. Patel

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/20/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***General Status***

1. This is a First Action on the Merits. Claims 1-15 are pending in the case.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 4 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4, depends from claim 4, hence is vague and indefinite.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of

this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-3, 5-8 and 10-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by Koehler et al. (US 6,719,573).

For claims 1, 6, 12 and 6, Koehler et al. in figures 1-8, discloses a construction for mounting at least one terminal 22 having at least one resilient contact 26, to be inserted along an inserting direction into a hole in a circuit board 50, and a jig contact 24 bulging out at an angle to the inserting direction, behind the resilient contact, the jig contact having a width and length, a poisoning plate 28, the positioning plate has at least one insertion hole 42, the positioning hole is dimensioned to receive the jig contact, the insertion hole 42 having a depth that is at least equal to the length of the jig contact of the terminal (see figure 8).

For claims 2 and 7, the positioning plate is fixedly mounted to a housing 12 of the circuit board connector 10. For claims 3 and 8, the resilient contacts are radially deformable (column 4, lines 20-25). For claims 5 and 10, the jig contact has rounded front edge (see figure 7). For claim 11, the jig contact has rear edge, which is substantially normal (perpendicular) to the insertion direction. For claim 13, the positioning plate contacts the circuit board (when circuit board is installed, see figure 5).

6. Claims 1-3, 5-8 and 10-13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Cuff et al. (US 6,155,887).

For claims 1, 6, 12 and 6, Cuff et al. in figures 1-10, discloses a construction for mounting at least one terminal 10 having at least one resilient contact 16, to be inserted along an inserting direction into a hole in a circuit board 36, and a jig contact 19 bulging out at an angle to the inserting direction, behind the resilient contact, the jig contact having a width and

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length, a poisoning plate 26, 41, the positioning plate has at least one insertion hole 27, the positioning hole is dimensioned to receive the jig contact, the insertion hole having a depth that is at least equal to the length of the jig contact of the terminal (see figures 9 and 10).

For claims 2 and 7, the positioning plate is fixedly mounted to a housing 22 of the circuit board connector (figures 4-9). For claims 3 and 8, the resilient contacts are radially deformable due to spring element 16, 17. For claims 5 and 10, the jig contact has rounded front edge at 20. For claim 11, the jig contact has rear edge 22, which is substantially normal (perpendicular) to the insertion direction. For claim 13, the positioning plate contacts the circuit board (when circuit board is installed, see figure 9).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler et al. (US 6,719,573) in view of Kendall et al. (US 4,878,861).

As discussed above, Koehler et al. satisfies the limitations of claims 1-3, 5-8, 10-13. However, Koehler et al. does not disclose resiliently deformable portion formed adjacent each of the resilient contact and the resiliently deformable portion being thinned with respect to the resilient contact. Kendall et al. in figure 1-3, discloses a resilient contact with deformable portion 68 and the deformable portion is thinned compared to the resilient contact 12.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the resilient portion of the contact of Koehler et al. and provide a thinned portion adjacent to the resilient contact as taught by Kendall et al, so that the resilient contact is prevented from splitting and shearing (Kendall et al, column 2, lines 20-22).

9. Claims 4, 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cuff et al. (US 6,155,887) in view of Kendall et al. (US 4,878,861).

As discussed above, Cuff et al. satisfies the limitations of claims 1-3, 5-8 and 10-13. However, Cuff et al. does not disclose resiliently deformable portion formed adjacent each of the resilient contact and the resiliently deformable portion being thinned with respect to the resilient contact. Kendall et al. in figure 1-3, discloses a resilient contact with deformable portion 68 and the deformable portion is thinned compared to the resilient contact 12.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the resilient portion of the contact of Cuff et al. and provide a thinned portion adjacent to the resilient contact as taught by Kendall et al, so that the resilient contact is prevented from splitting and shearing (Kendall et al, column 2, lines 20-22).

***Allowable Subject Matter***

10. Claim 15 is allowed.

**11.** The prior art made of record and not relied upon is considered pertinent to applicant's invention. Lenoir (US 5,639,249), Benes (6,059,608), Kinsey Jr. et al. (US 5,863,222), Nelson et al. (US 5,692,912), Wu (US 6,447,307), Clark et al. (US 5,453,016) all disclose connector with positioning plate. Liebich et al. (US 4,954,103), Harting et al. (US 4,867,710),

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Sakuraoka et al. (US 5,738,550) and Harting et al. (US 4,762,498) disclose compliant pin with web member.

Applicant also should consider these references in response to this office action. Should issue arise concerning the rejection presented above, these references may be relied upon in a subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. C. Patel whose telephone number is (571) 272-2098. The examiner can normally be reached on 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 271-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



T. C. Patel  
Primary Examiner  
Art Unit 2839

Tcp  
June 13, 2004